



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

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Dirk Kempthorne, Governor  
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September 20, 2000

Mr. Kevin O'Neill  
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**Subject: Comments on the Scope of Work (SOW) for the Comprehensive Remedial Investigation and Feasibility Study (RI/FS) for the Radioactive Waste Management Complex, Subsurface Disposal Area**

Dear Mr. O'Neill:


This letter is in response to your letter of August 15, 2000 transmitting a revised (SOW) for Operable Unit 7-13/14 RI/FS. With this revised SOW, DOE is proposing to modify the scope, schedule, and strategy for the RI/FS agreed to in the August 1998 Work Plan Addendum. DEQ does not support a departure from the overall strategy presented in the Work Plan Addendum required by the Pit 9 Settlement Agreement. As discussed during our August 24-26, 2000 meetings, more emphasis needs to be placed on ensuring remedial alternatives are fully developed for in-situ, ex-situ and retrieval technologies. Although significant progress was made in the review of Remedial Investigation tasks and objectives currently underway, further progress needs to be made to reach agreement with the principle study questions which will guide remaining tasks to fulfill RI/FS objectives. These objectives and schedule concerns must be resolved within the framework of the existing work plan and the FFA/CO. Schedule and budget considerations are an important part of these discussions. Until there is resolution of these issues, we do not see a need for this revised Scope of Work to be finalized. If changes are needed, the Work Plan is the appropriate primary document for these modifications. We suggest that our meetings scheduled for the week of September 24, be directed towards reaching a resolution on any outstanding scope for which DOE needs DEQ and EPA input, prior to planning activities to be conducted in FY01 and planned for FY02 and FY03. Any other issues impacting DOE's ability to comply with the current scope and schedule should be brought to the Agencies attention at that time.

Based on our review of the revised scope and schedule, treatability studies required under the existing work plan, and the incorporation of results from the Stage II effort at Pit 9, will not be available for incorporation into the Feasibility Study necessary to evaluate alternatives for the buried waste at the Subsurface Disposal Area. This

information was to have been available for incorporation into the Feasibility Study by May 2001, according to the August 1998 Work Plan Addendum. If the in-situ treatability study were progressing according to the March 1999 ISV Treatability Study Work Plan schedule, the field scale hot test should have been completed by August of this year. Considering DOE has just initiated bench scale testing and is now proposing to complete the field scale demonstration after the proposed plan, we are concerned that the Feasibility Study will not provide the information needed to evaluate the alternatives necessary for remedy selection. Other treatability studies were also called for by the work plan. DOE's plans for conducting these studies, and the resulting data from these studies, do not appear consistent with work plan objectives and schedules. DOE should provide a schedule that identifies how DOE will meet the commitments in the existing work plan. This schedule should identify treatability studies, which demonstrate retrieval, in-situ and ex-situ technologies as part of the Feasibility Study process not clearly identified in the schedule provided in the revised Scope of Work. The level of detail for this schedule should be that of the schedule in the current Work Plan Addendum. Enclosed are comments that identifies our concerns in more detail.

Should you have questions regarding these comments, please contact me at (208) 373-0285.

Sincerely,



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## COMMENTS ON THE REVISED SCOPE OF WORK (SOW) FOR THE COMPREHENSIVE REMEDIAL INVESTIGATION AND FEASIBILITY STUDY (RI/FS), RADIOACTIVE WASTE MANAGEMENT COMPLEX, SUBSURFACE DISPOSAL AREA

### DOE Proposed Scope of Work Modifications

DOE is proposing this revised Scope of Work to modify the scope of the Remedial Investigation and Feasibility Study as defined by the WAG 7-13/14 RI/FS Work Plan and the Work Plan Addendum in the following ways:

- \* Replace coring through the waste with expanded probing and coring and probehole monitoring.
- \* Defer the treatability studies for in-situ thermal desorption and ex-situ soil treatments.
- \* Modify the end uses of some data collection which would result in probehole monitoring data not being available in time to support the Baseline Risk Assessment, but using this data to support the feasibility study, proposed plan, Record of Decision, and remedial design and remedial action.
- \* Eliminate the probabilistic risk assessment.
- \* Use the same models as were used in the Interim Risk Assessment with only minor modifications.
- \* Clarify the scope of the human health and ecological risk assessment that will be performed in the Feasibility Study to support the detailed analysis of remedial alternatives (e.g. residual risks associated with remedial alternatives).
- \* Specify expanded activities to communicate WAG plans and activities to stakeholders.
- \* Update the descriptions of the dependencies and interfaces between OU 7-13/14 and OU 7-10 (Pit 9 Interim Action) activities.
- \* Design and implement a data quality objective (DQO) plan for OU 7-13/14.

### General Comment

Five treatability studies were identified in the Work Plan Addendum to support the development of the Feasibility Study. This revised Scope of Work does not include these treatability studies. The revised Scope of Work raises several questions with respect to the proposed departure from DOE's current obligation under the Work Plan addendum.

- \* How does DOE propose to meet these data needs required by the Work Plan addendum, and what is the schedule for this work?
- \* What information does DOE see as critical to the evaluation of the alternatives presented in the current Work Plan Addendum? How does DOE plan to obtain this information?
- \* What are DOE's plans if the current problems encountered by the probing effort are not resolved in sufficient time to provide data to the RI/FS? How does the proposed revision to the Scope of Work address and resolve this problem?
- \* If information from probing is not available, how will this data need affect the RI/FS?
- \* With the current schedule of events, the lack of retrieval data from 7-10 also needs to be considered. How does DOE propose to collect information to demonstrate a retrieval alternative in the feasibility study?
- \* It is likely that the final remedy for the RWMC may involve several combinations of proposed technologies. These may include retrieval and treatment of "hot spot" areas, which may pose critical issues. If WAG 7-13/14 is not going to have that information, it leaves considerable cost and implementation uncertainty for the 7-13/14 RI/FS.
- \* What are DOE's plans for field verification and validation of waste disposal to support waste type and location as presented in the GIS? How does DOE envision using this database in the RI/FS?
- \* Why is a revised Scope of Work necessary, given an acceptable Work Plan is already in place?

### Specific Comments

1. Page 1 Introduction, first bullet. Before coring is replaced with probing and probehole monitoring, a determination needs to be made as to what data is lost by not coring, and if it can be replaced by probing. This decision should be re-evaluated with more careful attention to the liabilities that can impact project objectives.
2. Page 1. Introduction, second bullet. Treatability studies are a valuable component in the analysis of treatment technologies that can be applied. The DQO process should be used to determine the consequences and severity of erroneous actions pertaining to this decision.
3. Page 1, third bullet. Data from the Type B probes, e.g. lysimeters, is intended to collect leachate from waste, and specifically, to determine the oxidation state of various actinides so the data can be inputted into the TETRAD model. If the data is not available prior to the drafting of the BRA and the modeling itself is not complete, then an

incomplete RI/BRA will be the result under the current schedule. We agree that probehole data can be used to help determine if disposal records are accurate and to define the area extent of specific types of waste and thus the best location for the ISV hot test. However, it appears to have limited value for the other parts of the CERCLA process, which is mentioned.

4. Page 1. Introduction, fifth bullet. Provide details regarding the minor modifications that will be made. Progress should be made in the effort to determine why organic compounds and radionuclides have been detected in the Snake River Plain aquifer. There are still gaps that are not addressed with the model used in the IRA (effect of spreading areas, sorption coefficients used, colloidal transport of radionuclides, etc.) The SOW should determine how to address these items of concern.

5. The consensus among the 7-13/14 WAG Managers was that we would collect two years of data after all of the various instrumentation was installed within the SDA and elsewhere necessary to support the RI in accordance with the current Work Plan. The revised SOW does not address the following: 1) Under the current schedule, how will sufficient data be collected prior to drafting of the RI to make this document acceptable? and 2) If not, specific data and length of time is necessary to gather these data under a revised schedule?

6. Page 14. Remedial Investigation/Feasibility Study Report, first paragraph. Provide information detailing some of the assumptions about major risk drivers. The consequence of not obtaining appropriate data for risk evaluation and alternative analysis should be resolved and explained in sufficient detail to determine the impact to the remedy selection process.

7. Page 15. Evaluation of Remedial Alternatives, second paragraph, last sentence. Without actual performance and implementability of retrieval and treatment, it will be difficult to consider its use in the OU 7-13/14 RI/FS. This can have a significant impact on the detailed analysis of alternatives and unfairly skew the analysis in favor of those technologies for which data is available, or result in the selection of a remedy, which will not be protective of human health and the environment.